

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

|  |  |  |                  |
|--|--|--|------------------|
| Applicant's or agent's file reference  | <b>FOR FURTHER ACTION</b>  |  | See item 4 below |
| International application No.<br>PCT/IL2004/000688   | International filing date ( <i>day/month/year</i> )<br>27 July 2004 (27.07.2004) | Priority date ( <i>day/month/year</i> )<br>29 July 2003 (29.07.2003) |                  |
| International Patent Classification (8th edition unless older edition indicated)<br>See relevant information in Form PCT/ISA/237 |  |  |                  |
| Applicant<br>RAPHAELI, Dan   |  |  |                  |

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1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).
2. This REPORT consists of a total of 4 sheets, including this cover sheet.  
  
In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Box No. I | Basis of the report   |
| <input type="checkbox"/> Box No. II           | Priority  |
| <input type="checkbox"/> Box No. III          | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| <input type="checkbox"/> Box No. IV           | Lack of unity of invention  |
| <input checked="" type="checkbox"/> Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> Box No. VI           | Certain documents cited   |
| <input type="checkbox"/> Box No. VII          | Certain defects in the international application  |
| <input type="checkbox"/> Box No. VIII         | Certain observations on the international application   |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

|   |  |
|---|--|
| The International Bureau of WIPO<br>34, chemin des Colombettes<br>1211 Geneva 20, Switzerland<br><br>Facsimile No. +41 22 740 14 35 | Date of issuance of this report<br>30 January 2006 (30.01.2006)  |
|   | Authorized officer<br><br><p style="text-align: center;">Simin Baharlou</p> Telephone No. +41 22 338 71 30 |

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:  
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**PCT**

REC'D 11 FEB 2005

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## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

|   |  |  |
|---|--|--|
| Applicant's or agent's file reference   |  | Date of mailing<br>(day/month/year) <b>08 FEB 2005</b>             |
|   |  | <b>FOR FURTHER ACTION</b><br>See paragraph 2 below                 |
| International application No.<br><b>PCT/IL04/00688</b>  | International filing date (day/month/year)<br><b>27 July 2004 (27.07.2004)</b> | Priority date (day/month/year)<br><b>29 July 2003 (29.07.2003)</b> |
| International Patent Classification (IPC) or both national classification and IPC<br><b>IPC(7): H04Q 1/00, G08B 1/08 and US Cl.: 340/10.1, 539.13, 825.49</b> |  |  |
| Applicant<br><b>RAPHAELI DAN</b>  |  |  |

1. This opinion contains indications relating to the following items:

- |                                     |              |  |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the opinion   |
| <input type="checkbox"/>            | Box No. II   | Priority   |
| <input type="checkbox"/>            | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability   |
| <input type="checkbox"/>            | Box No. IV   | Lack of unity of invention   |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited  |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application   |
| <input type="checkbox"/>            | Box No. VIII | Certain observations on the international application  |

### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

|  |  |
|--|--|
| Name and mailing address of the ISA/ US<br>Mail Stop PCT, Attn: ISA/US<br>Commissioner for Patents<br>P.O. Box 1450<br>Alexandria, Virginia 22313-1450<br>Facsimile No. (703) 305-3230 | Authorized officer<br>Edwin C. Holloway, III<br><br>Telephone No. (703) 305-4700 |
|--|--|

Form PCT/ISA/237 (cover sheet) (January 2004)

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WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/IL04/00688

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  
☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
☐ a sequence listing  
☐ table(s) related to the sequence listing
  - b. format of material  
☐ in written format  
☐ in computer readable form
  - c. time of filing/furnishing  
☐ contained in international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/IL04/00688

**Box No. V Reasoned statement under Rule 43 bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

|                               |                    |     |
|-------------------------------|--------------------|-----|
| Novelty (N)                   | Claims <u>2-42</u> | YES |
|                               | Claims <u>1</u>    | NO  |
| Inventive step (IS)           | Claims <u>NONE</u> | YES |
|                               | Claims <u>1-42</u> | NO  |
| Industrial applicability (IA) | Claims <u>1-42</u> | YES |
|                               | Claims <u>NONE</u> | NO  |

**2. Citations and explanations:**

Claim 1 lacks novelty under PCT Article 33(2) as being anticipated by Creek (US 5771002) Creek discloses a locator method and system including a handheld master unit that identifies and interrogates a satellite unit RF tag with a command from a directional antenna. The satellite unit sends a response signal synchronized to the command. The master unit includes audible and visual indication satellite unit location. See abstract, col. 7 lines 30-41, col. 13 lines 50-67.

Claims 2 and 27-42 lack an inventive step under PCT Article 33(3) as being obvious over Creek (US 5771002) as discussed above in view of Anders (US 4656463). Anders discloses an analogous art RF tag locating method and system including a handheld interrogator with audible, visual and vibratory location indication. The antenna may be a phased array with azimuth and bearing movement. The location indication includes range (distance) measured by time interval (round trip delay) and azimuth/bearing measured by the phased array using known radar ranging. See fig. 29, col. 24 Line 52 - col. 25 line 2, col. 37 lines 6 - 37, col. 8 line 16 - col. 39 line 22. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in Creek the phased array and azimuth indication of Anders in order to allow direction indication without the need of the user to manually turn in a circle to fine the direction of maximum signal. Round trip delay would have been obvious in view of Anders disclosing reception interval measuring for radar ranging.

Claims 3-26 lack an inventive step under PCT Article 33(3) as being obvious over Creek (US 5771002) and Anders (US 4656463) as discussed above and further in view of Wang (US 5912644) or MacLellan (US 5940006) Wang and MacLellan disclose analogous art RF tag interrogation/location systems/methods including wideband (CDMA / spread spectrum) communication. See the abstracts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included in the combination applied above the wideband communication of Wang or MacLellan for known advantages such as reduced interference.